

FIG. 1

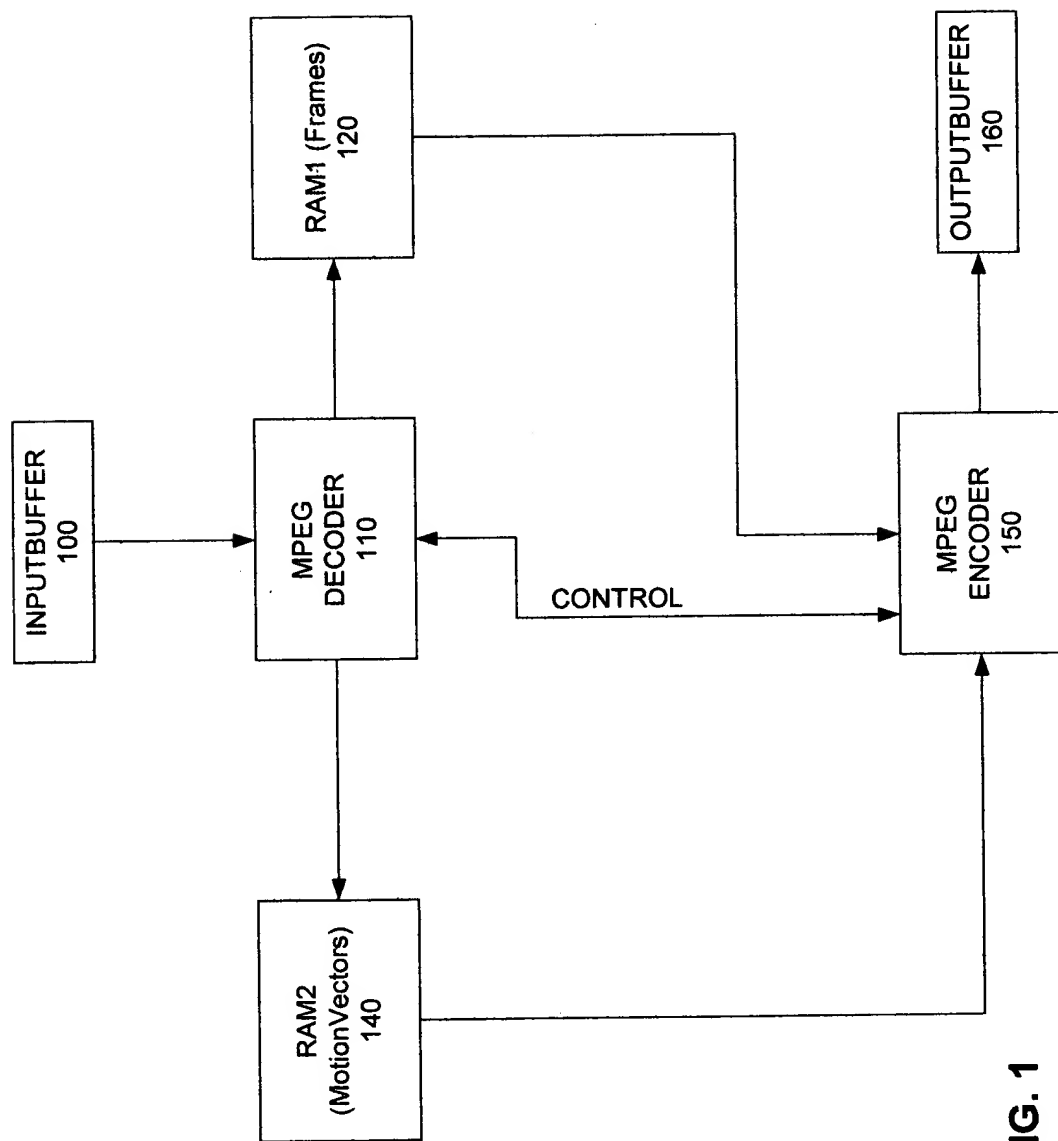


FIG. 1

FIG. 2 is a flowchart illustrating a video encoding and decoding process. The process begins with BIT PARSING (310), which leads to Variable Length Decode (320). This is followed by DeQuantize (330) and IDCT (340). A decision is made at End of Macroblock? (350). If YES, the process proceeds to Decoder Motion Vector? (360). If YES, the process proceeds to Save Motion Vector (370), then Motion Compensation (380), and finally DOWNSCALE AND WRITE MACROBLOCK (390). If NO at 350, the process proceeds to Decoder End of Frame? (395). If YES at 395, the process proceeds to Initialize Frame Encoder (410), then Encode a Macroblock (420), then Motion Vector Exists? (430). If YES at 430, the process proceeds to Retrieve Motion Vectors (440), then Build New Motion Vector (450), then Read Macroblock and Build Delta Macroblock (460), then DCT all blocks in Macroblock (480), then Quantization (485), then Variable Length Encode (488), and finally Output Encoded Macroblock (490). If NO at 430, the process proceeds to Read Macroblock (470), then DCT all blocks in Macroblock (480), then Quantization (485), then Variable Length Encode (488), and finally Output Encoded Macroblock (490). If NO at 430, the process proceeds to Read Macroblock (470), then DCT all blocks in Macroblock (480), then Quantization (485), then Variable Length Encode (488), and finally Output Encoded Macroblock (490). If NO at 430, the process proceeds to Read Macroblock (470), then DCT all blocks in Macroblock (480), then Quantization (485), then Variable Length Encode (488), and finally Output Encoded Macroblock (490).

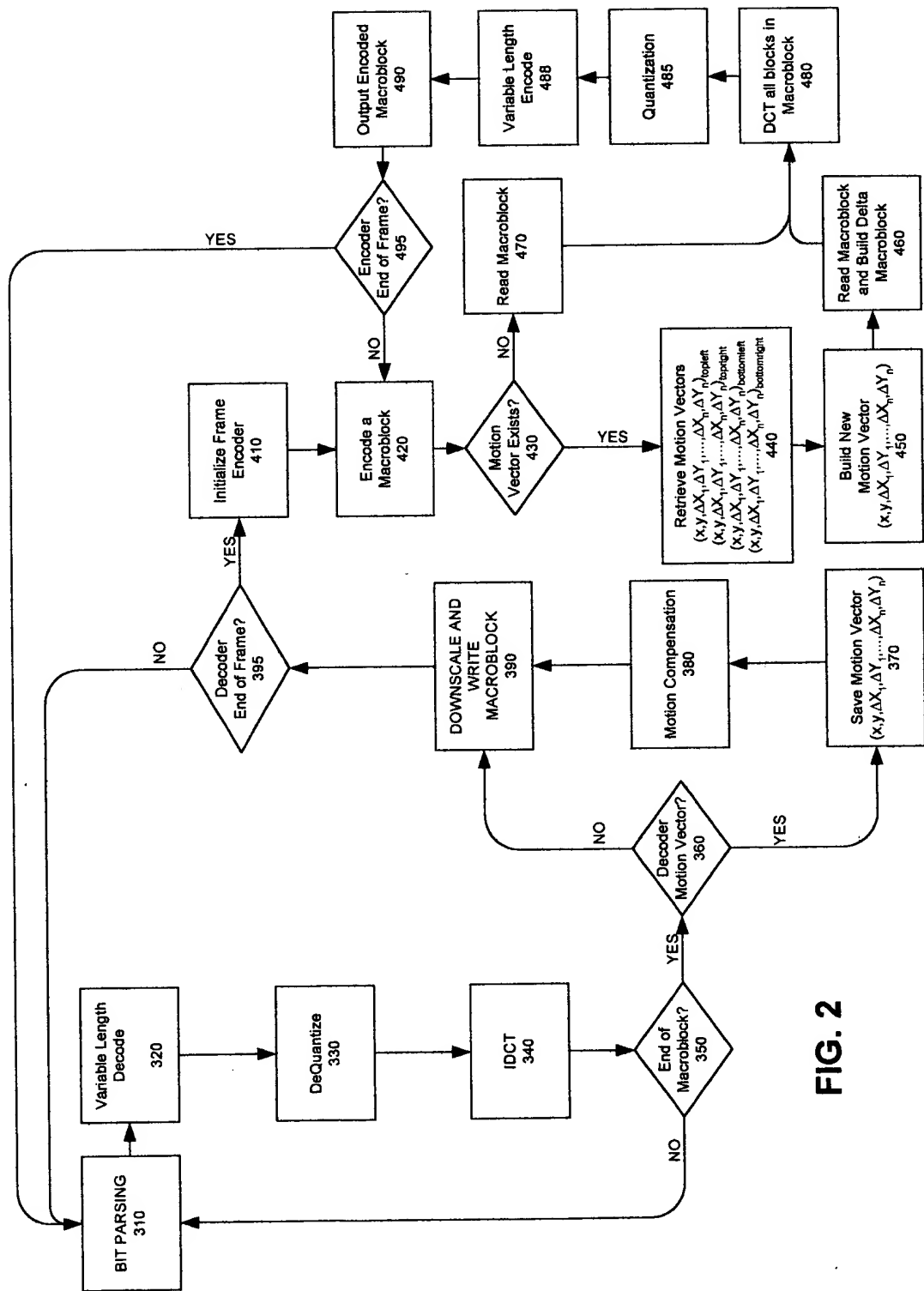


FIG. 2

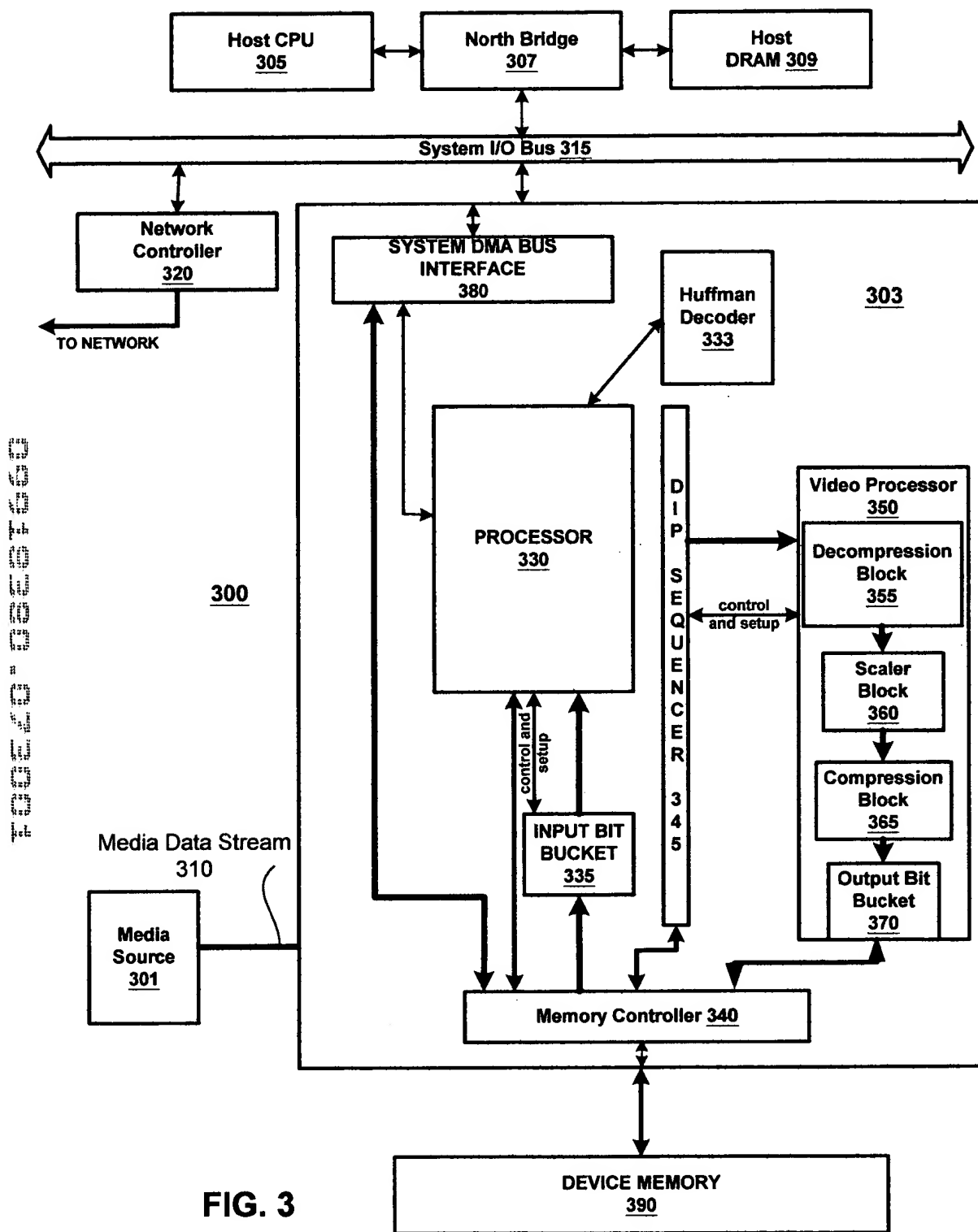


FIG. 3

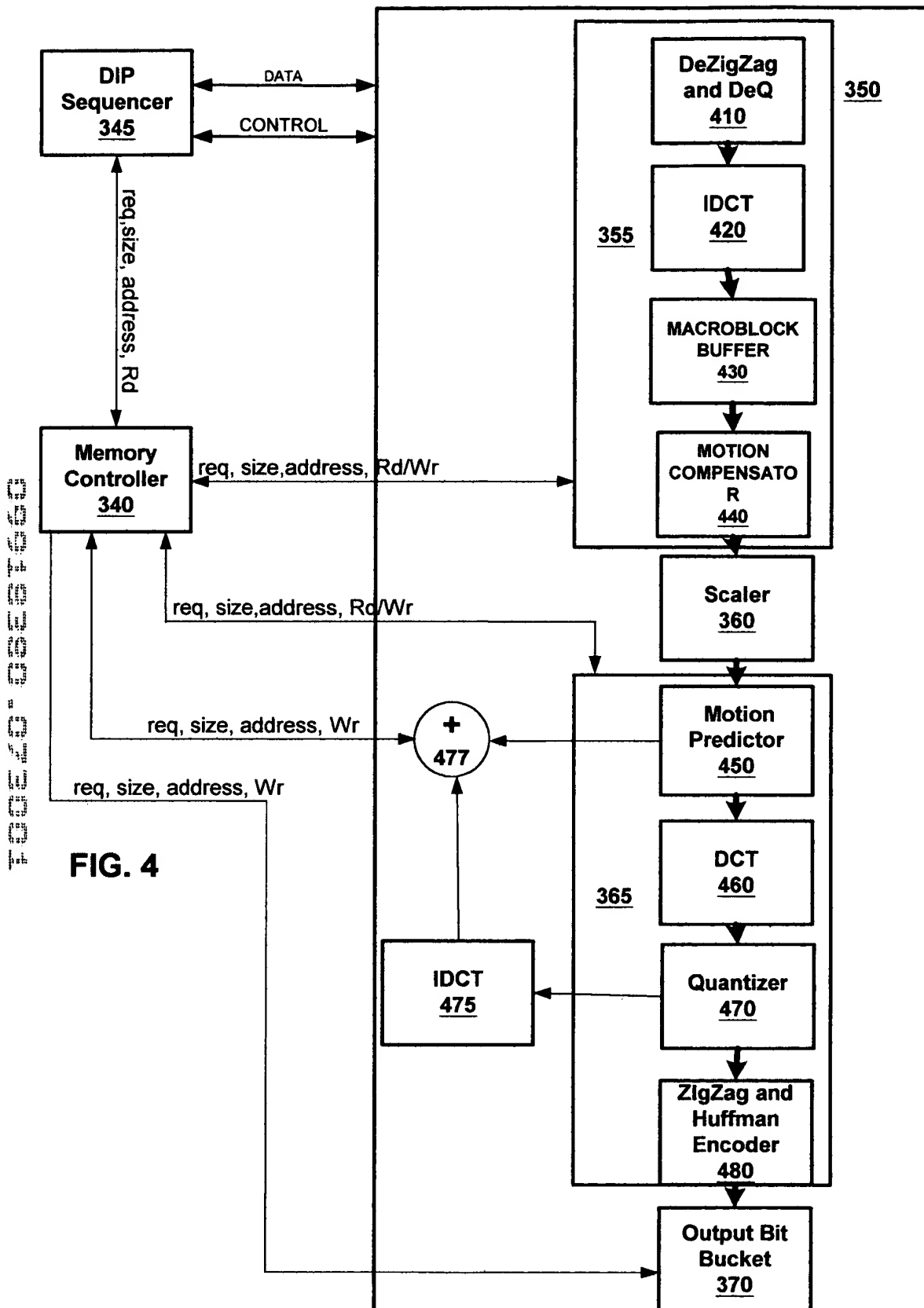


FIG. 4

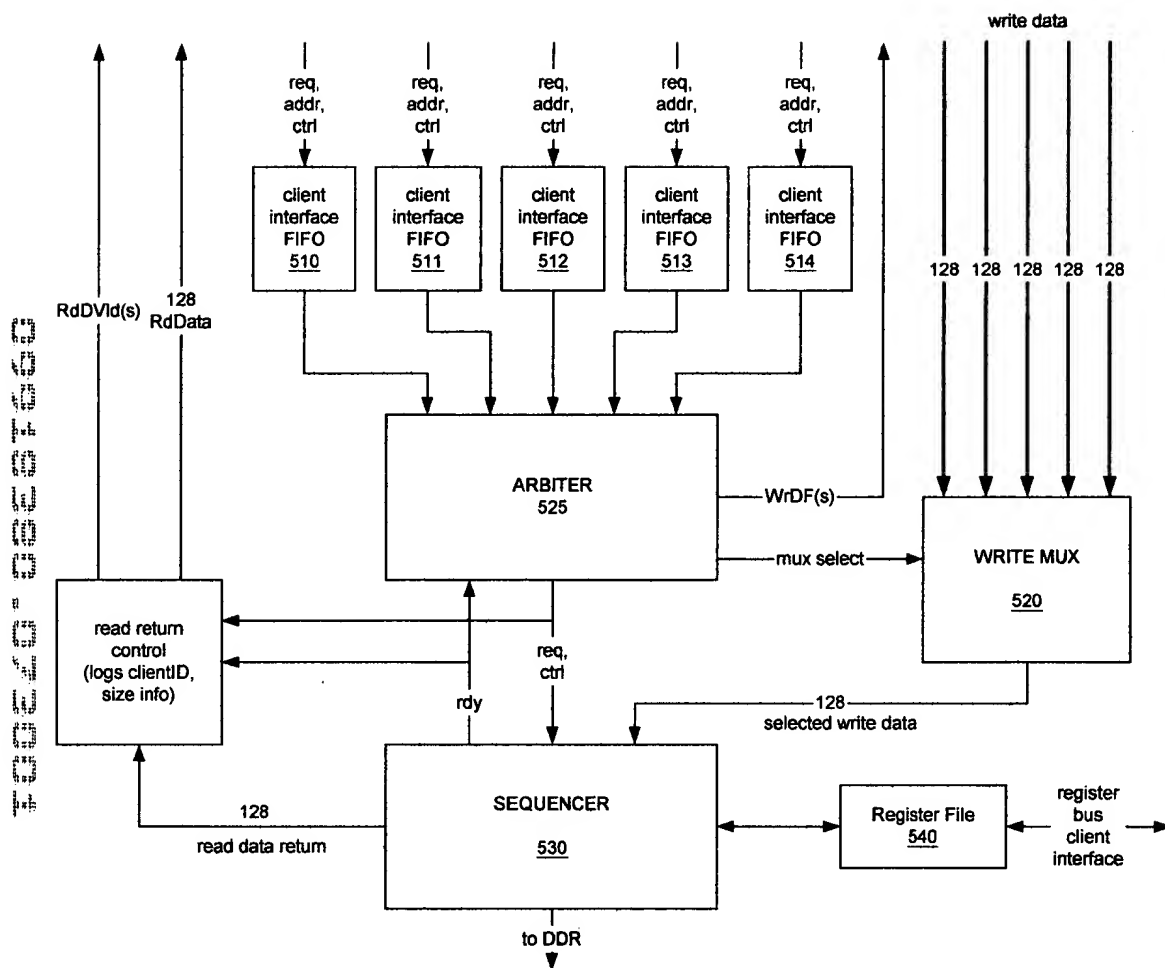


FIG. 5

600

FIG. 6

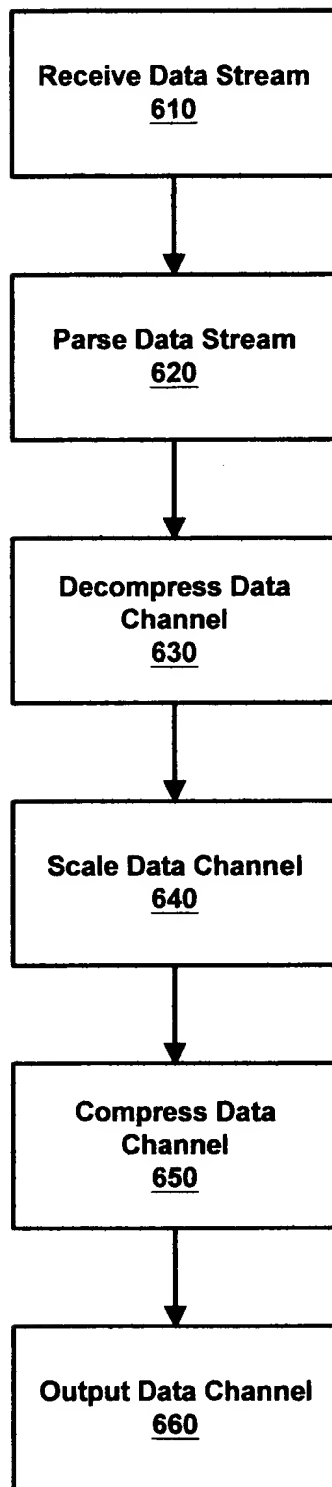


FIG. 6B

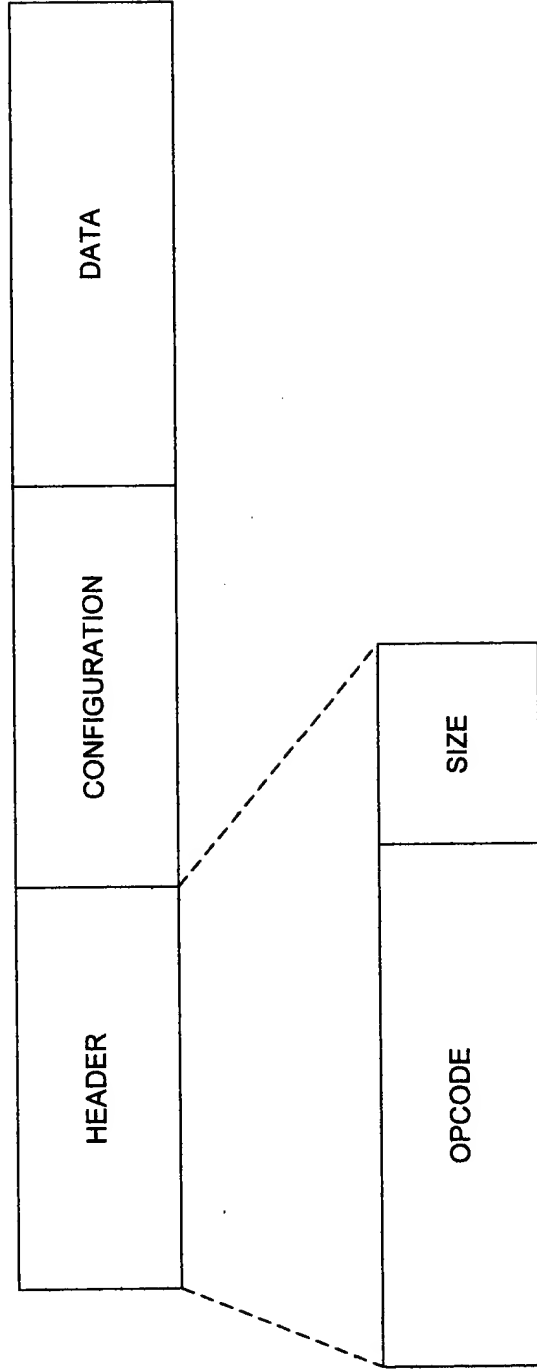
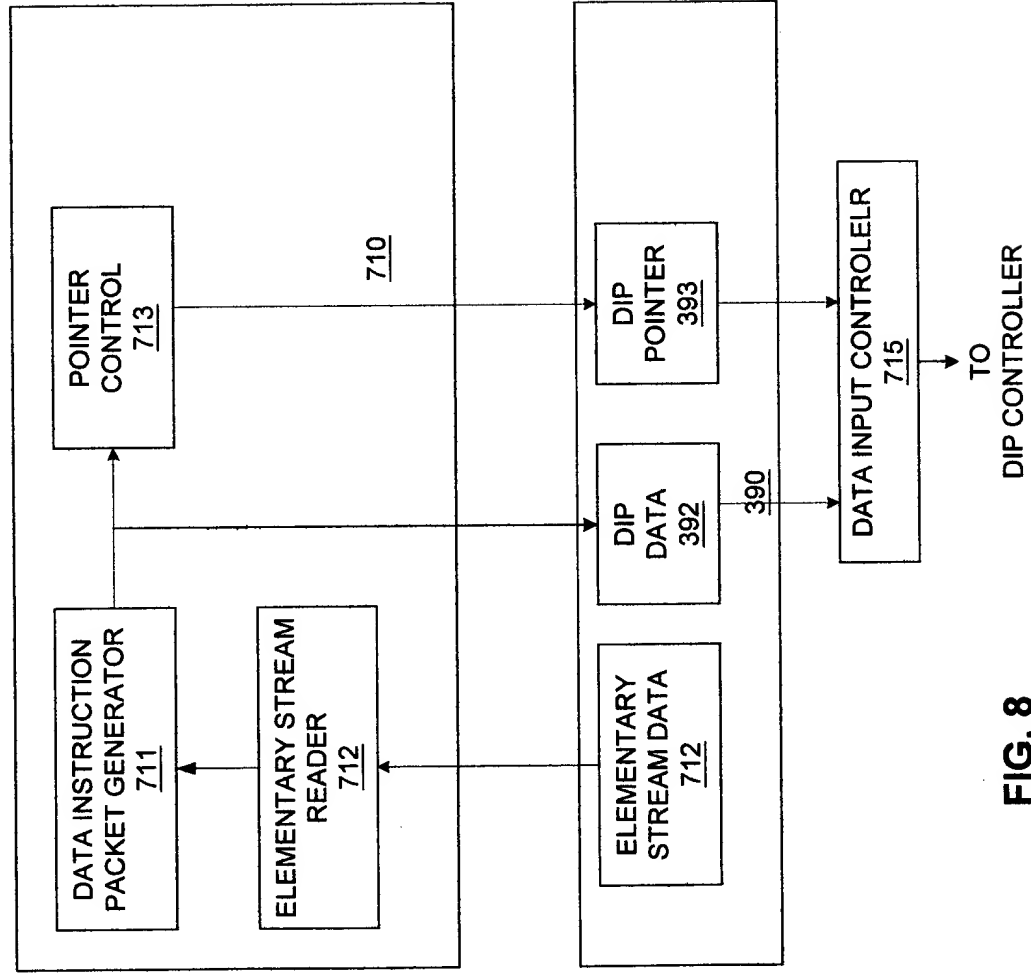


FIG. 7



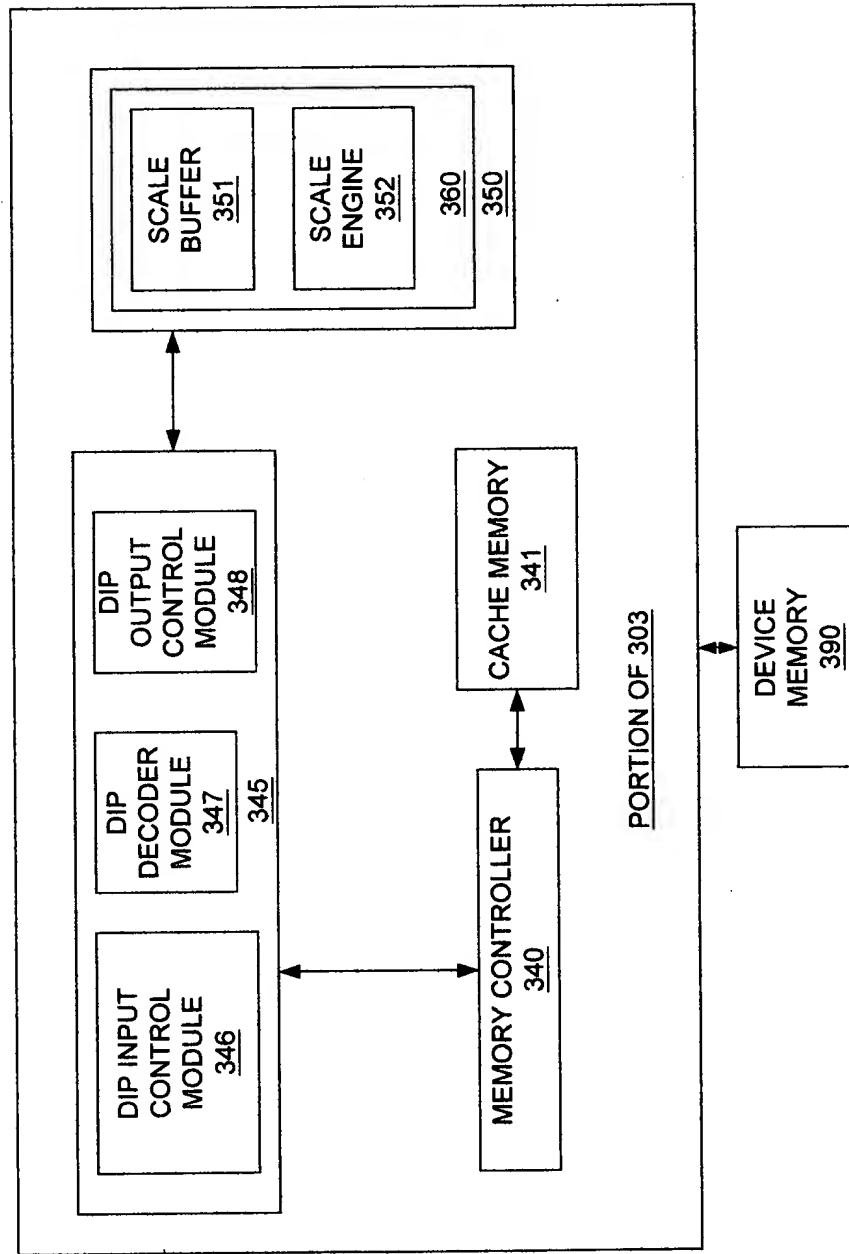


FIG. 9

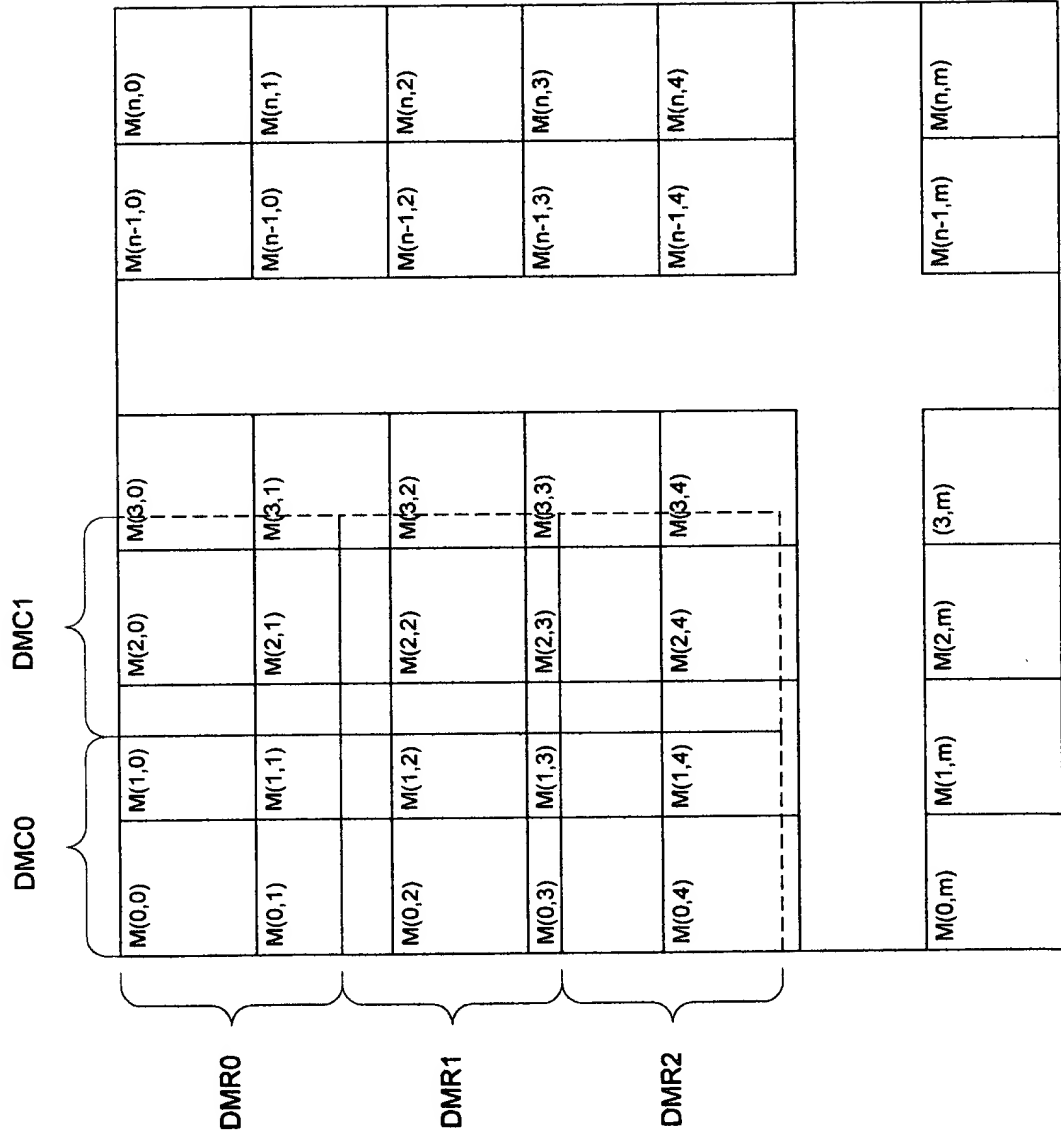


FIG. 10

FIG. 10

D(0,0)
D(1,0)
D(2,0)
D(3,0)
.
.
.
D(n,m)

FIG. 11

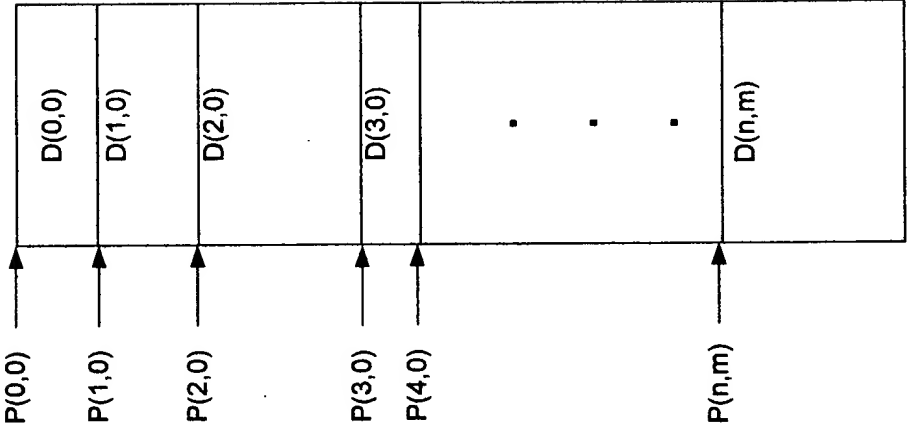


FIG. 13

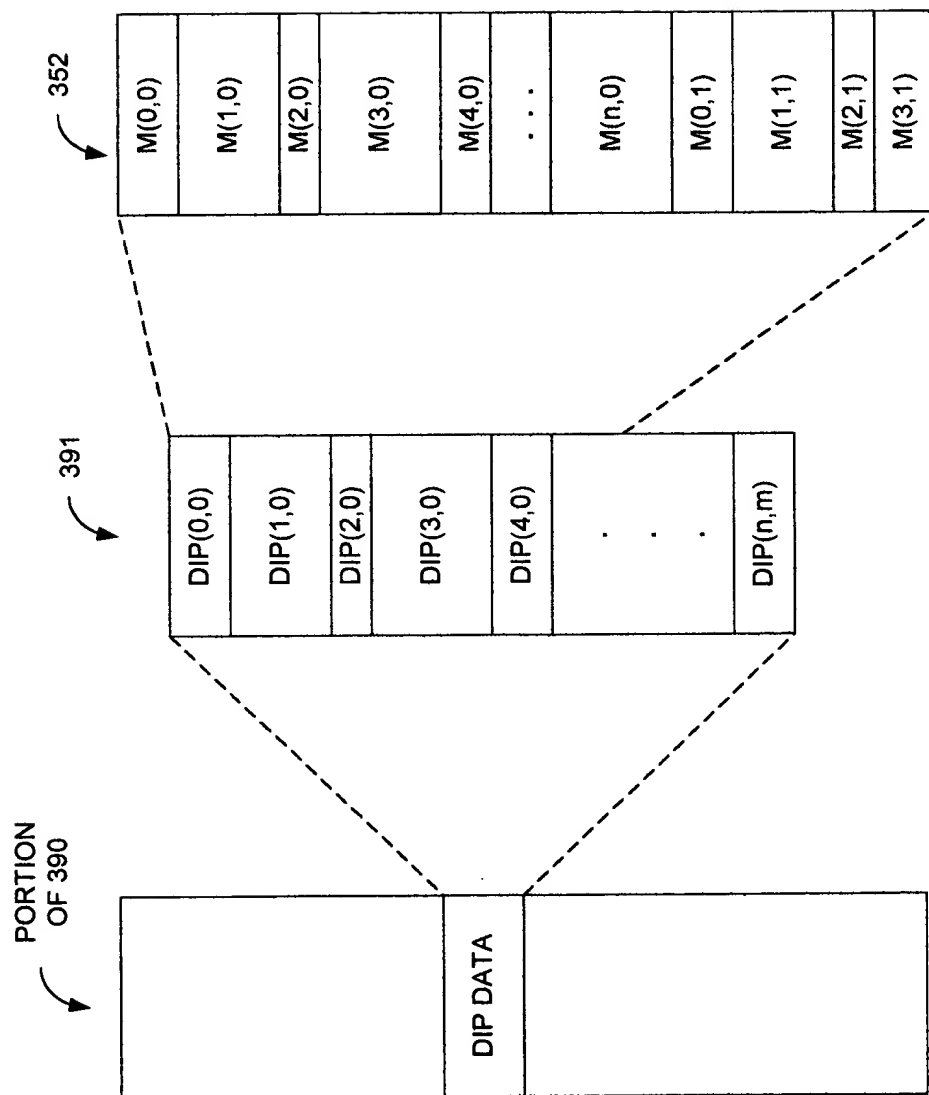


FIG. 12

FIG. 14

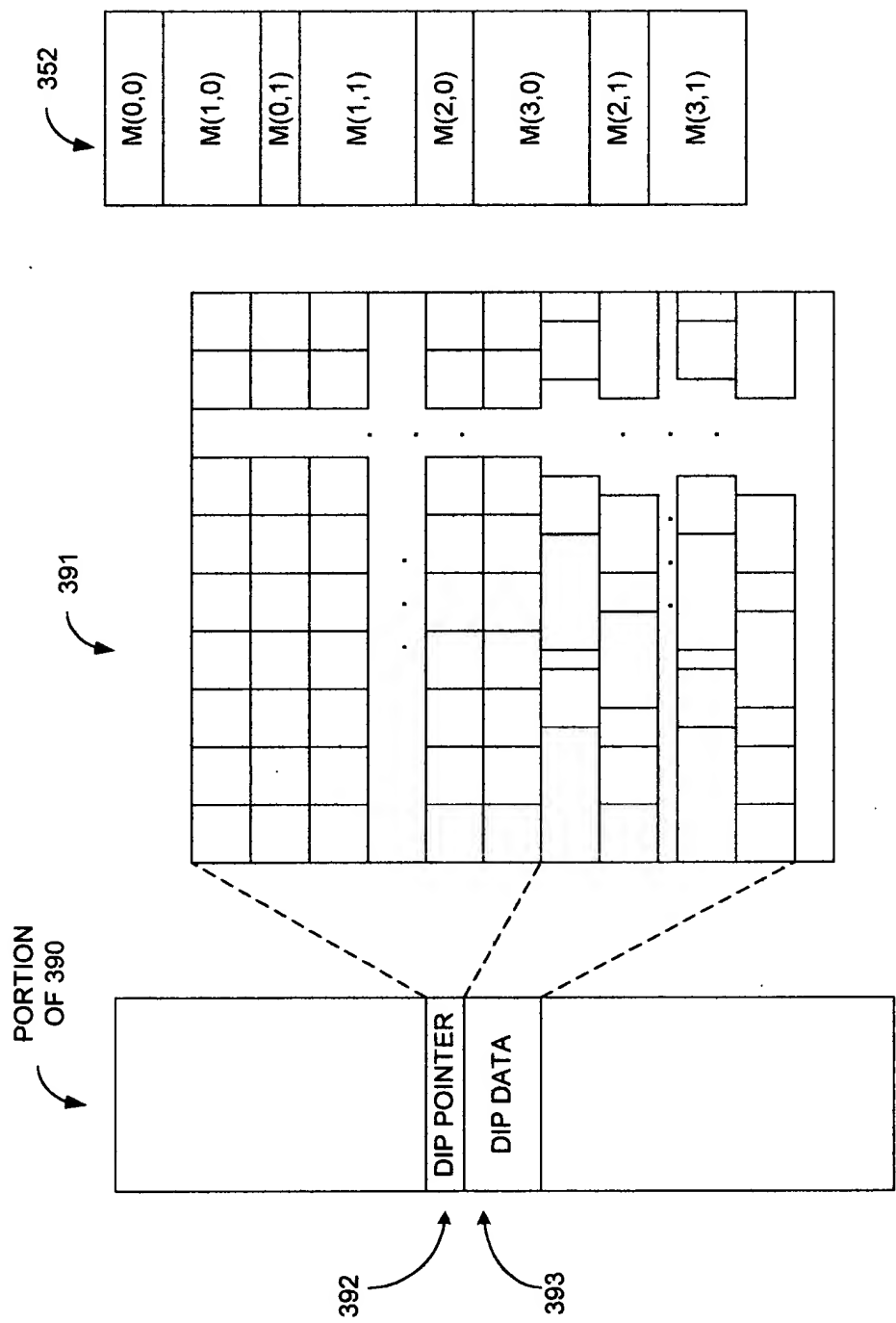


FIG. 14

STORE A FIRST SET OF
MACROBLOC DATA IN A
SCALE BUFFER
710



STORE A SECOND SET OF
MACROBLOCK DATA IN THE
SCALE BUFFER
711

FIG. 15

STORE A SET OF DIPS
HAVING VARIABLE SIZES IN
A FIRST SEQUENTIAL
ORDER
751



RETRIEVE DIPS IN SECOND
SEQUENTIAL ORDER
DIFFERENT THAT THE FIRST
752

FIG. 19

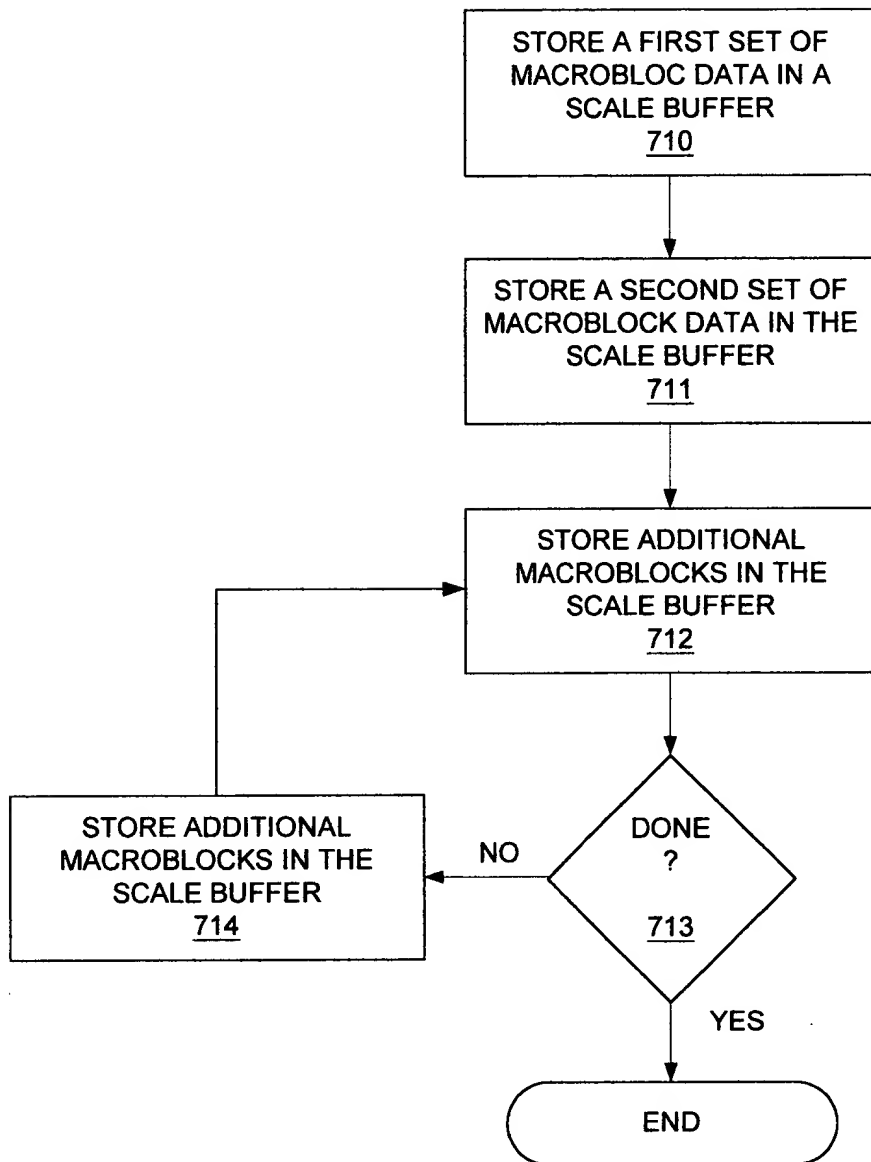


FIG. 16

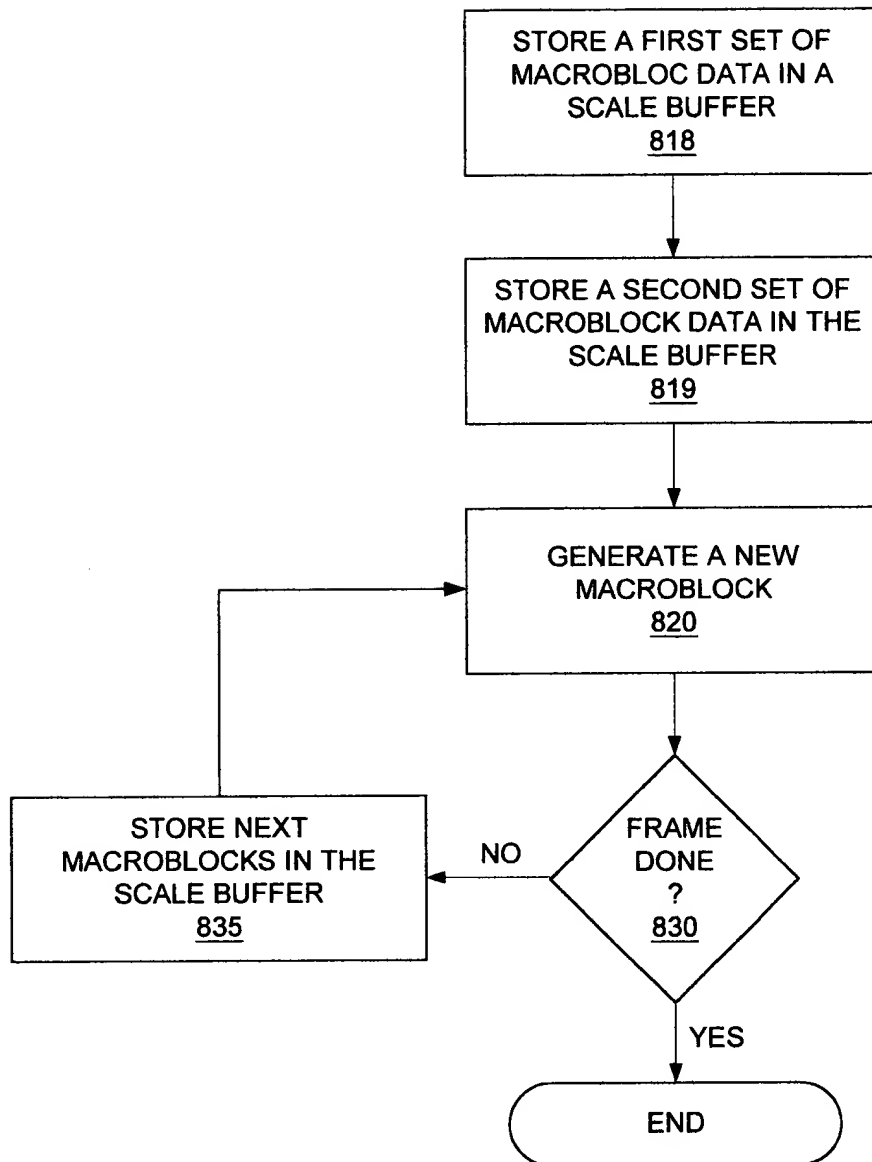


FIG. 17

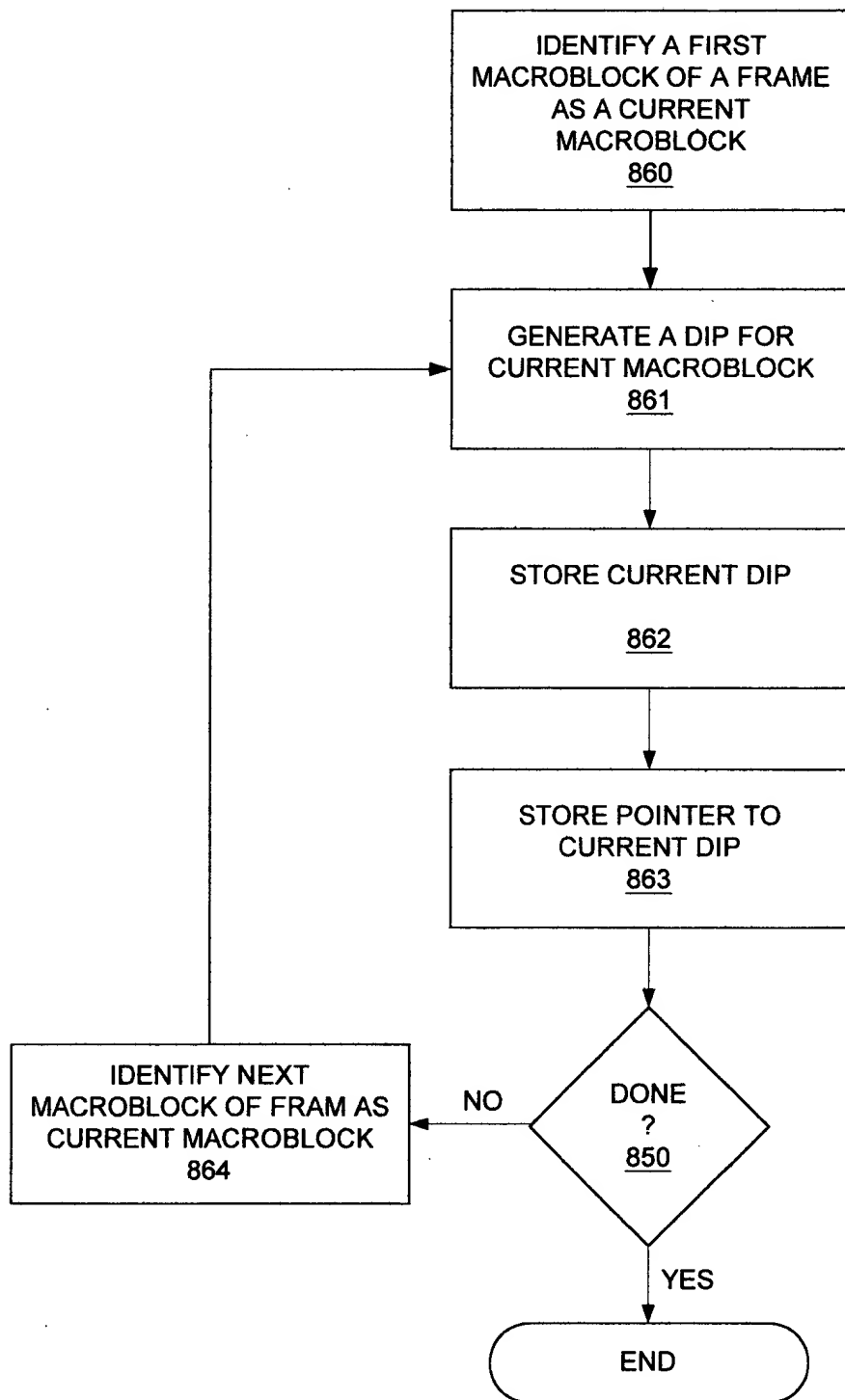


FIG. 18

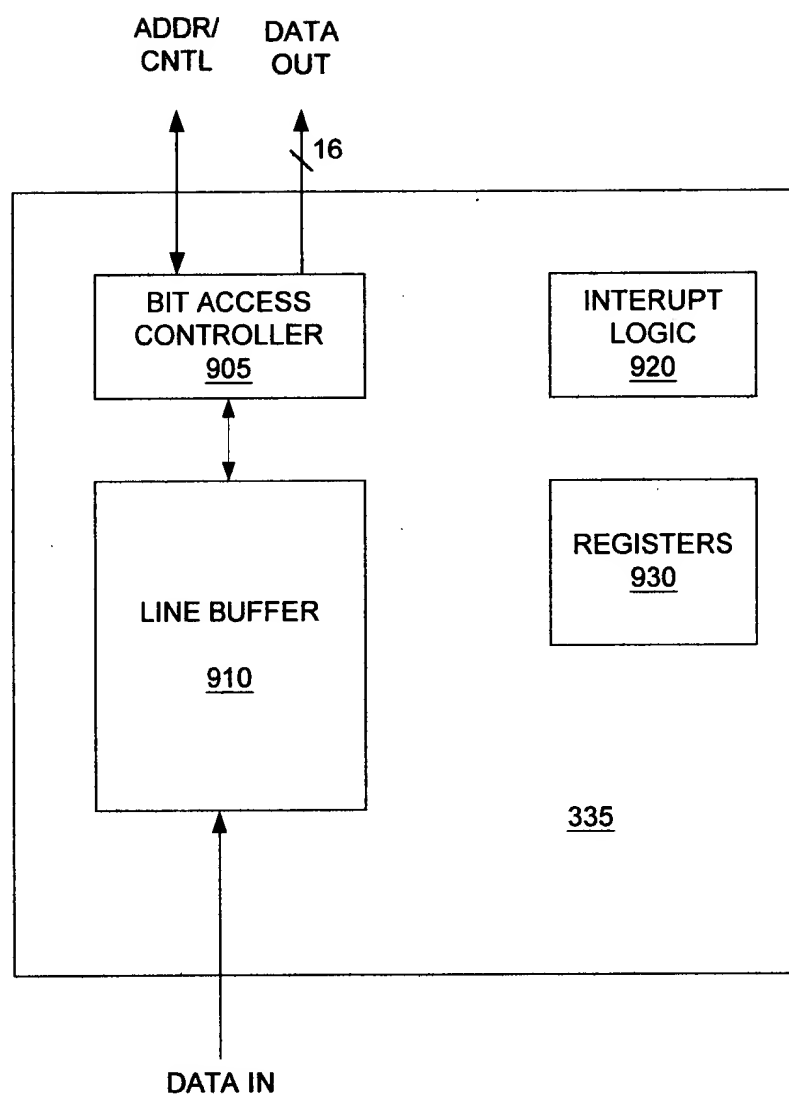


FIG. 20

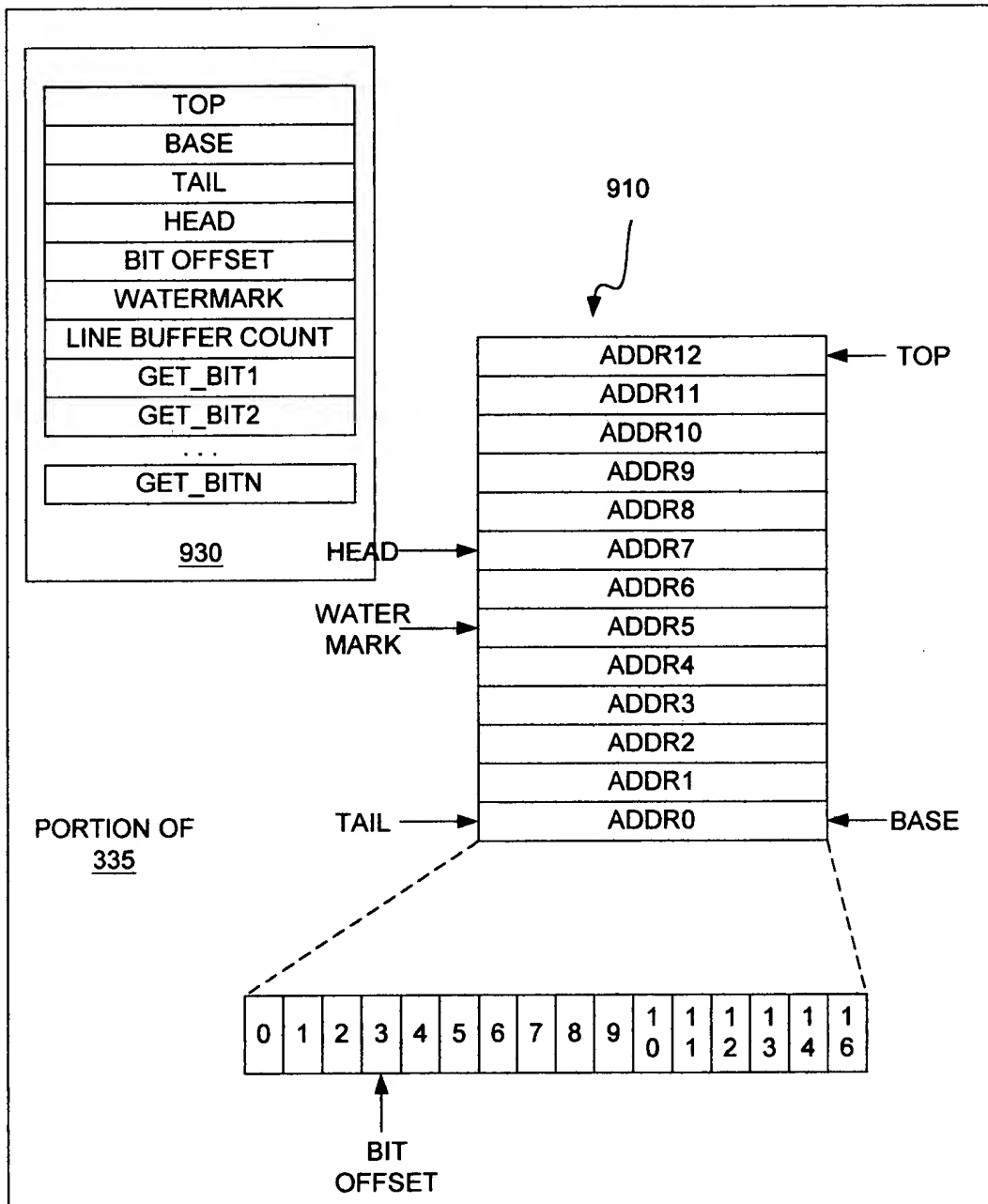


FIG. 21

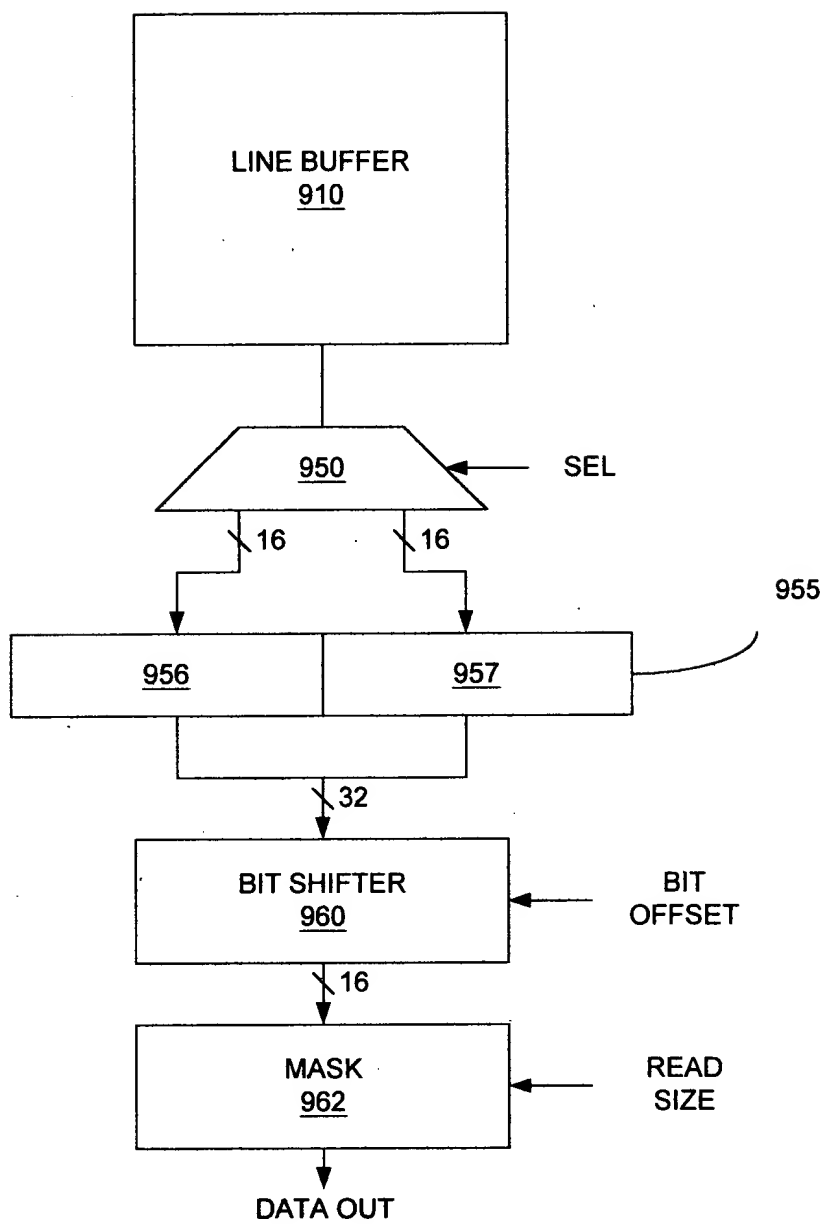


FIG. 22

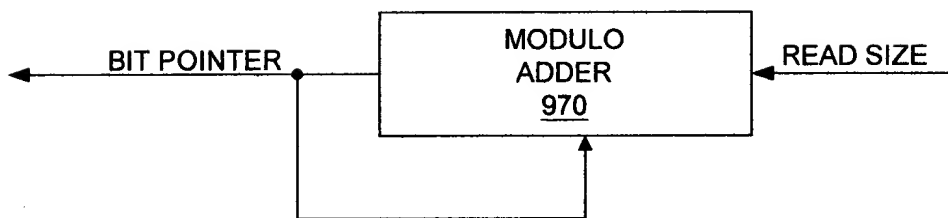


FIG. 23